

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
7 April 2005 (07.04.2005)

PCT

(10) International Publication Number
WO 2005/031068 A1

(51) International Patent Classification⁷: **D21H 21/22**

(21) International Application Number:
PCT/US2003/027310

(22) International Filing Date: 28 August 2003 (28.08.2003)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (for all designated States except US): **KIMBERLY-CLARK WORLDWIDE, INC.** [US/US]; 401 N. Lake Street, Neenah, WI 54956 (US).

(71) Applicant (for US only): **SHANKLIN, Gary, Lee** [US/US]; 1604 Meadowbreeze Circle, Neenah, WI 54956 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **ZWICK, Kenneth, John** [US/US]; 730 Congress Place, Neenah, WI 54956 (US). **SHANNON, Thomas, Gerard** [US/US]; 1604 Meadowbreeze Circle, Neenah, WI 54956 (US). **REKOSKE, Michael, John** [US/US]; 3227 N. Country Run Drive, Appleton, WI 54914 (US). **RICHARDSON, Kathy, GERALYN** [US/US]; W3050 Pinewood Court, Appleton, WI 54915 (US). **PAULING, Paul, Kerner** [US/US]; 2008 Twin Willows Drive, Appleton, WI 54914 (US). **BURAZIN, Mark, Alan** [US/US]; 1101 Ceape

Avenue, Oshkosh, WI 54901 (US). **KREMER, Thomas** [US/US]; 2314 North Superior Street, Appleton, WI 54911 (US). **SIERRA, Benjamin, Peter** [US/US]; 3624 S. School Avenue, Appleton, WI 54915 (US).

(74) Agents: **BAUM, Scott, A.** et al.; Kimberly-Clark Worldwide, Inc., 401 N. Lake Street, Neenah, WI 54956 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **SOFT PAPER SHEET WITH IMPROVED MUCUS REMOVAL**

(57) Abstract: Tissues having a high level of softness and hand protection in combination with improved cleaning are disclosed. The tissues have been shown to remove more mucus than commercially available tissues.



WO 2005/031068 A1